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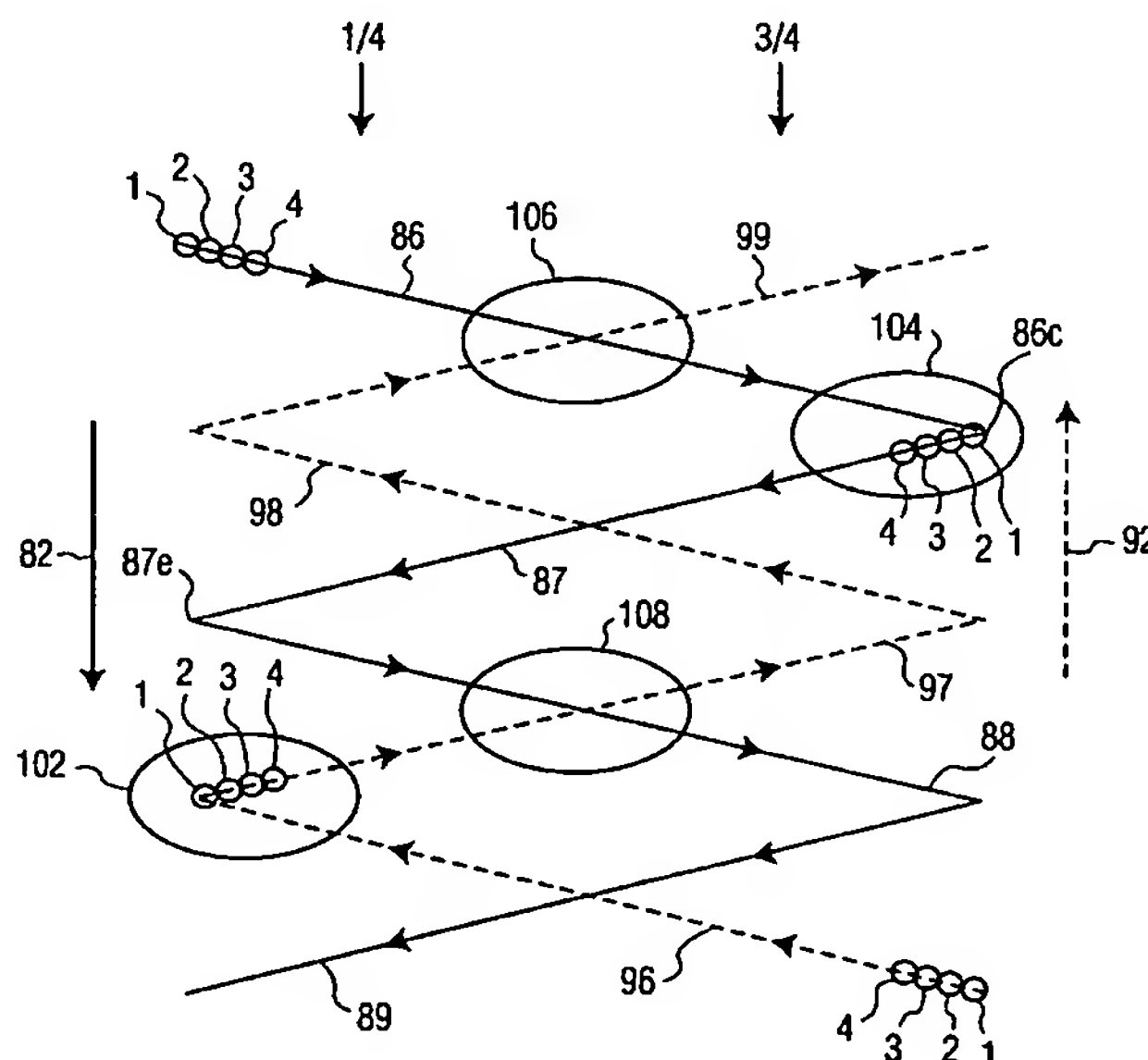
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(54) Title: **THREE-DIMENSIONAL ULTRASONIC IMAGING USING MECHANICAL PROBES WITH BEAM SCANNING  
REVERSAL**



(57) Abstract: An ultrasonic probe for three dimensional scanning includes a onedimensional array transducer which is mechanically swept back and forth. As the array transducer is swept in one direction the array scans the volumetric region with image planes which are scanned from left to right. As the array transducer is swept in the opposite direction the direction of beam scanning is reverse so that the volumetric region is scanned with image planes which are scanned from right to left. The reversal of the beam scanning direction causes the scanned planes to be substantially aligned, resulting in a reduction in scanning artifacts.



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